SONY

3-756-652-21(2)

AV Power Amplifier

TA-N731

Operating Instructions

Before operating the unit, please read this manual thoroughly and retain it for future reference.

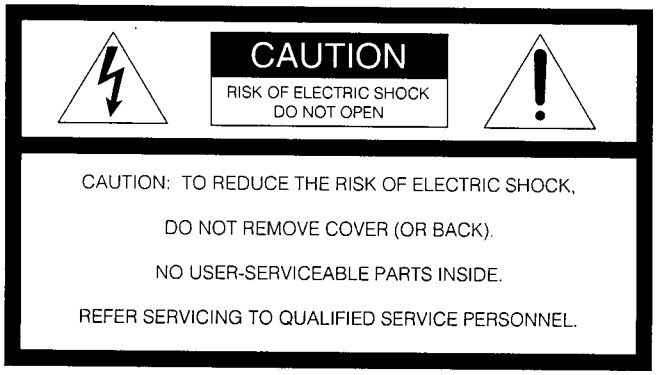
OWNER'S RECORD

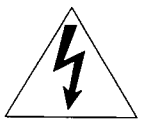
The model and serial numbers are located at the rear. Record serial number in the space provided below. Refer to them whenever you call upon your Sony dealer regarding this product.

Model No. TA-N731 Serial No._____

WARNING

To prevent fire or shock hazard, do not expose the unit to rain or moisture.


CAUTION
RISK OF ELECTRIC SHOCK
DO NOT OPEN
CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK,
DO NOT REMOVE COVER (OR BACK).
NO USER-SERVICEABLE PARTS INSIDE.
REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.



This symbol is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.

This symbol is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

* The graphical symbols are on the rear enclosure.

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Precautions

On safety

- Operate the unit only on 120 V AC, 60 Hz.
- Should any solid object or liquid fall into the unit, unplug it and have it checked by qualified personnel before operating it any further.
- Unplug the unit from the wall outlet if it is not to be used for an extended period of time. To disconnect the cord, pull it out by grasping the plug. Never pull the cord itself.
- One blade of the plug is wider than the other for the purpose of safety and will fit into the power outlet only one way. If you are unable to insert the plug fully into the outlet, contact your dealer.

On installation

- Place the unit on a level surface.
- Do not install the unit in a location near heat sources such as radiators or air ducts, or in a place subject to direct sunlight, excessive dust, mechanical vibration or shock.
- Good air circulation is essential to prevent internal heat built-up in the unit. Place the unit in a location with adequate air circulation. Do not place the unit on a soft surface, such as a rug that would block the ventilation holes on the bottom.
- Do not place anything on top of the cabinet. The top ventilation holes must be unobstructed for the proper operation of the unit and to prolong the life of its component.

On cleaning the cabinet

Clean the cabinet, panel and controls with a soft cloth lightly moistened with mild detergent solution. Do not use any type of abrasive pad, scouring powder or solvent such as alcohol or benzine.

On repacking

Do not throw away the carton and the packing material. It makes an ideal container to transport the unit in.

If you have any question or problem concerning your unit, please consult your nearest Sony dealer.

For detailed precautions, see the leaflet "IMPORTANT SAFEGUARD". (Model for USA)

For the customers in Canada

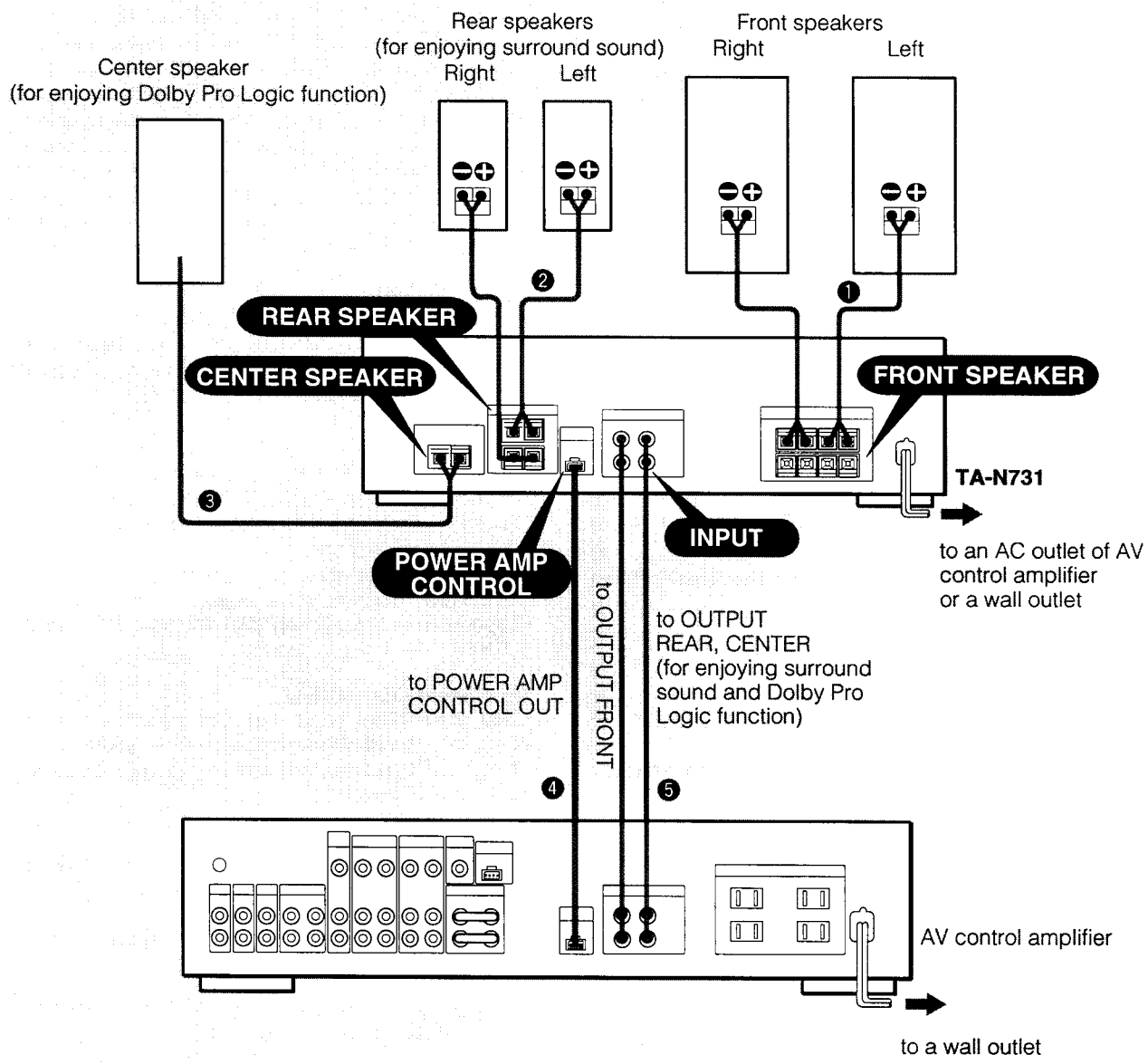
CAUTION

TO PREVENT ELECTRIC SHOCK, DO NOT USE THIS POLARIZED AC PLUG WITH AN EXTENSION CORD, RECEPTACLE OR OTHER OUTLET UNLESS THE BLADES CAN BE FULLY INSERTED TO PREVENT BLADE EXPOSURE.

Connections

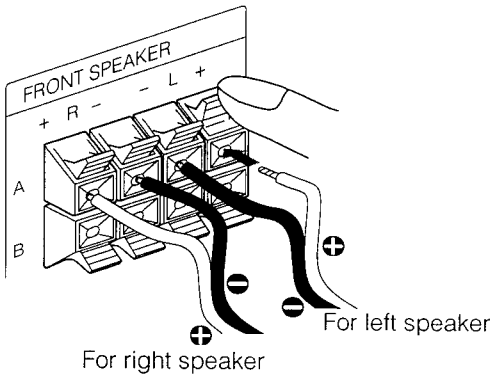
- Connect the AC power cord last. Make sure power is off.
- Cord plugs and jacks are color coded. Red plugs and jacks are for right channel (R) of the FRONT INPUT terminals and white ones for left channel (L) of that terminals. And also, red plugs and jacks are for REAR terminal and white ones for CENTER terminal.
- The cable connectors should be fully inserted into the jacks. A loose connection may cause hum and noise.
- The + and – cords of the speaker systems should be correctly connected to the + and – terminals of the amplifier respectively.

The numbers correspond to the following details.



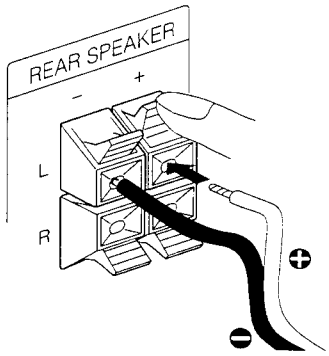
❶ Front speaker cords

You can connect two pairs of speaker systems: system A and system B.
They can be selected individually or simultaneously with the selector on the front panel.



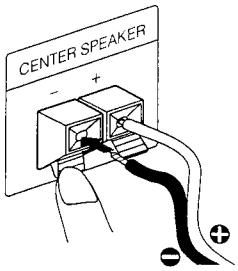
❷ Rear speaker cords

Connect a pair of rear speaker systems for enjoying surround sound.



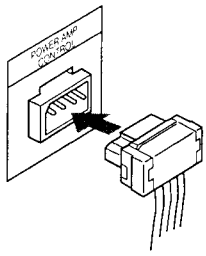
❸ Center speaker cords

Connect one center speaker system for enjoying Dolby Pro Logic function.

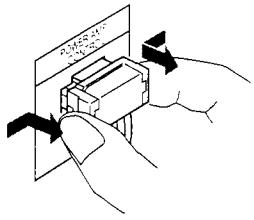


❹ Power amplifier control cord (not supplied)

Connect to the POWER AMP CONTROL OUT jack of the AV control amplifier with the control cord.



Push in until it clicks.



To disconnect, pull it out by grasping both sides of the plug.

❺ Audio connection cords (not supplied)

TA-N731 has one REAR INPUT terminal to drive rear speakers, and a CENTER INPUT terminal to drive center speaker.
Connect to the REAR OUTPUT and CENTER OUTPUT terminals of AV control amplifier with audio connection cords. (Red colored cord for connection of REAR INPUT terminal on the unit and REAR OUTPUT terminal on the AV control amplifier, and white colored cord for CENTER INPUT and OUTPUT terminals on each unit.)

Specifications

Model for U.S.A.

AUDIO POWER SPECIFICATIONS
POWER OUTPUT AND TOTAL HARMONIC DISTORTION:
With 8-ohm loads, both channels driven, from 20 - 20,000 Hz; rated 135 watts per channel minimum RMS power, with less than 0.9% total harmonic distortion from 250 milliwatts to rated output.

Amplifier section

Power bandwidth (IHF)
7 Hz – 30 kHz (8 ohms)

Overall output (1 kHz)
135 W + 135 W (front, at rear/center off at 8 ohms)
15 W + 15 W (rear, at front/center off at 8 ohms)
30 W (center, at front/rear off at 4 ohms)

Harmonic distortion
Less than 0.9% (at 1 kHz, 8 ohms loads, front: 135 W + 135 W, rear/center off)

Intermodulation (IM) distortion (60 Hz : 7 kHz)
Less than 0.9 % at rated output

Frequency response
INPUT (FRONT/REAR/CENTER):
10 Hz – 70 kHz ±3 dB

Input sensitivity: 1 V (50 kilohms)

Damping factor: 40 (8 ohms, 1 kHz)

Signal-to-noise ratio
115 dB

Output
FRONT SPEAKER and REAR SPEAKER:
Accepts speakers of 8 - 16 ohms.
CENTER SPEAKER:
Accepts speaker of 4 - 16 ohms
HEADPHONES:
Accepts low and high impedance headphones.

General

Power requirements
120 V AC, 60 Hz

Power consumption
250 W

Dimensions: Approx. 430 x 130 x 345 mm (w/h/d)
(17 x 5 1/8 x 13 5/8 inches)
(including projecting parts and controls)

Mass: Approx. 9 kg (19 lb 13 oz)

Design and specifications are subject to change without notice.

Model for Canada

Amplifier section

Power bandwidth (IHF)
7 Hz – 30 kHz (8 ohms)

Overall output (1 kHz)
135 W + 135 W (front, at rear/center off at 8 ohms)
25 W + 25 W (rear, at front/center off at 8 ohms)
50 W (center, at front/rear off at 4 ohms)

Harmonic distortion
Less than 0.9% (at 20 Hz – 20 kHz, 8-ohm load, front: 135 W + 135 W, rear/center off)
Less than 0.09% (at 20 Hz – 20 kHz, 8-ohm load, front: 105 W + 105 W, rear/center off)
Less than 0.9% (at 1 kHz, 8-ohm load, rear: 20 W + 20 W, front/center off)
Less than 0.9% (at 1 kHz 4-ohm load, center: 40 W, front/rear off)

Intermodulation (IM) distortion (60 Hz : 7 kHz)
Less than 0.9 % at rated output

Frequency response
INPUT (FRONT/REAR/CENTER):
10 Hz – 70 kHz ±3 dB

Input sensitivity: 1 V (50 kilohms)

Damping factor: 40 (8 ohms, 1 kHz)

Signal-to-noise ratio
115 dB

Output
FRONT SPEAKER and REAR SPEAKER:
Accepts speakers of 8 - 16 ohms.
CENTER SPEAKER:
Accepts speaker of 4 - 16 ohms
HEADPHONES:
Accepts low and high impedance headphones.

General

Power requirements
120 V AC, 60 Hz

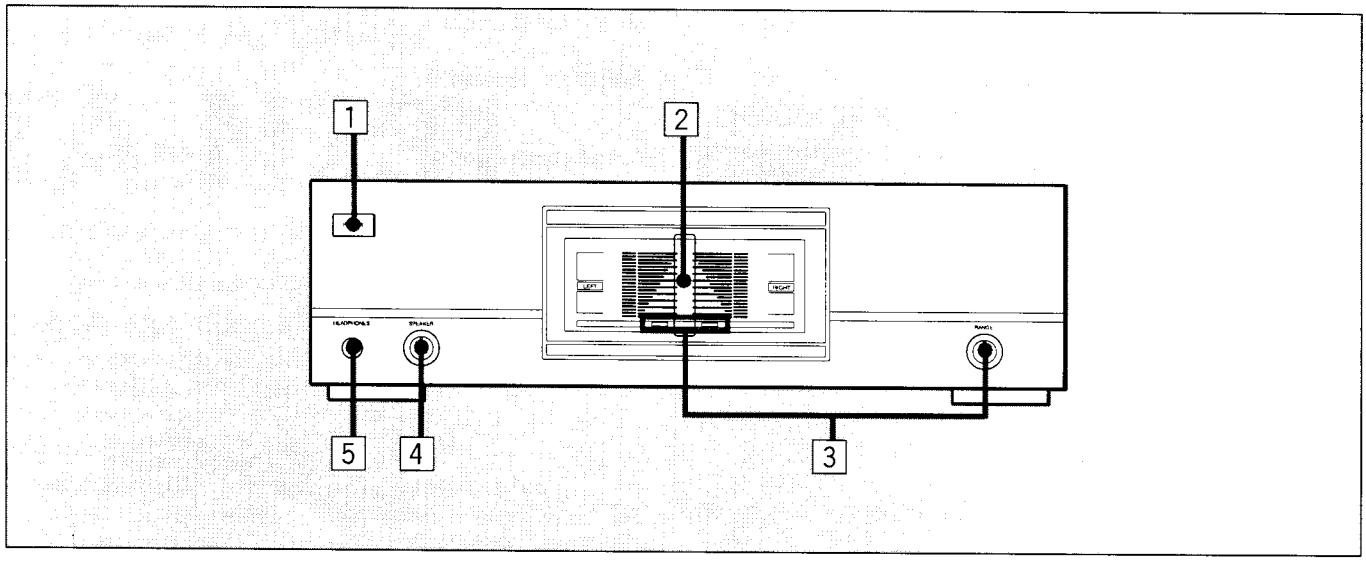
Power consumption
370 VA

Dimensions: Approx. 430 x 130 x 345 mm (w/h/d)
(17 x 5 1/8 x 13 5/8 inches)
(including projecting parts and controls)

Mass: Approx. 9.5 kg (20 lb 15 oz)

Design and specifications are subject to change without notice.

Function of Controls



1 POWER switch

Press to turn ON or OFF the unit.
To control the power of the unit with the power switch (SYSTEM POWER) of the AV control amplifier, connect the power cord of the unit to the switched AC outlet of the AV control amplifier and usually set the POWER switch of the unit to ON.

2 Peak power meters

Indicate the peak power levels of the LEFT and RIGHT channels independently.

3 RANGE selector and indicators

Select the range of the peak power meters:
x1: Peak power level is indicated by the scales (for use when listening at the high volume level).
x1/10: Peak power level is indicated by 1/10 of the scales (for use when listening at the low volume level).

4 SPEAKERS selector

Select the speaker system to be used.
A: To drive speaker system A.
B: To drive speaker system B.
A+B: To drive both speaker systems A and B.
OFF: For headphones listening only.

Notes

- Speaker systems A and B are series connected. No sound can be heard if the SPEAKERS selector is set to A+B when only one speaker system is connected.
- The sound of the rear or center speakers can be heard only when surround mode is selected on the AV control amplifier.

5 HEADPHONES jack (stereo phone jack)

Connect headphones for listening the sound of front speakers.

Notes

- After setting the volume level to minimum on the AV control amplifier, connect headphones.
- The sound of rear and center speakers cannot be heard from headphones.
- When using headphones, set the SPEAKERS selector on the front panel and the surround mode switch on the AV control amplifier to off so that sound may not be output from the front, rear, or center speakers.

Troubleshooting

Before going through the check list below, first refer back to the connection and operating procedures. Should any problem persist after you have made these checks, consult your nearest Sony dealer.

Trouble	Remedy
No audio.	Check the power cord connection.
	Check the SPEAKERS selector setting.
	Check the connections.
	Check the speaker terminal connection and the speaker cord for a short.
No audio from one channel.	Check the speaker cord or connecting cord connection.
Lack of bass sound or obscure instrument position.	Check if the positive (+) speaker terminal on the amplifier is not connected to the negative (–) terminal of the speaker, and vice versa.

Sony Corporation Printed in Japan